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HEALTHCARE

Value-Based Care

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White Paper

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The transition to value-based care (VBC) has begun to shape the face of the U.S. healthcare market and will do so increasingly in the coming years. Rising medical costs, regulatory pressures, and consumer demand for superior care have pushed providers to change the way they deliver and charge for medical services. While value-based care is at times narrowly defined as the transition from fee-for-service to bundled payments, we view VBC as a broader set of services, initiatives, and capabilities focused on shifting the quality/cost dynamic in healthcare. As such, VBC includes such services as population health management, evidence-based care, and quality measurement. The VBC transition represents a sea change for the market, and industry participants would do well to understand the near- and long-term implications of this trend.

Drivers of VBC Transition

Regulatory Impacts

In January of 2015, the Centers for Medicare and Medicaid Services (CMS) announced ambitious goals to tie 30% of Medicare spend to alternative payment models by 2016, with the share growing to 50% by the end of 2018. To that end, healthcare providers were presented several voluntary options—the two major models being the Accountable Care Organization (ACO) and the Bundled Payments model. Recent updates from the CMS indicate that the 30% goal was achieved in January 2016, although detailed adoption rates have not been released.

CMS departed from the voluntary nature of VBC adoption with a rule that the most common inpatient surgery for Medicare patients was required to be covered by VBC by April 2016. The “Comprehensive Care for Joint Replacement Model,” finalized in November 2015, stated that all providers receiving Medicare payments for knee and hip replacements would need to adhere to a bundled payments model. This sent hospitals scrambling to form partnerships with orthopedic surgeons and post-acute care providers, as the three entities would now need to split the bill (and potential savings) for end-to-end care.

CMS has not yet required bundling for other types of care, but the Joint Replacement Model serves as an example of CMS’s ability to expand adoption of VBC statutorily.

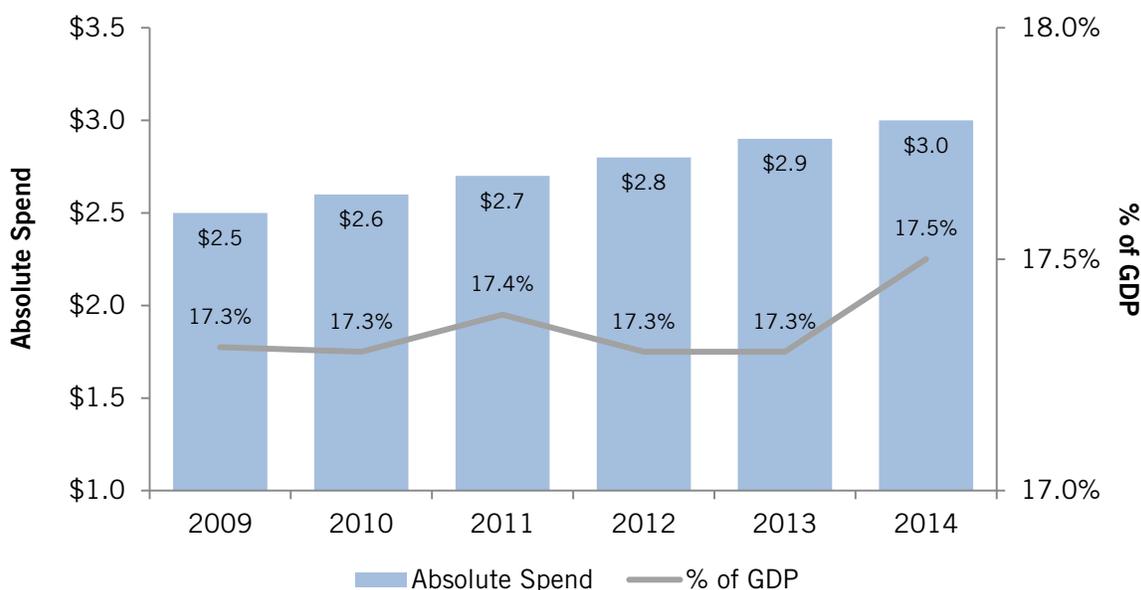
Industry Pressure

Payors and providers understand better than most that the rapidly increasing costs associated with delivering healthcare are unsustainable. A growing number of industry participants have voluntarily begun the transition toward VBC, and many have put in place concrete targets to urge transition. In January of 2015, a coalition of payors and providers called the Health Care Transformation Task Force followed

CMS's lead by targeting a shift of 75% of their contracts to VBC models by January 2020. This task force includes some of the largest U.S. health systems (Ascension, St. Louis, and Trinity Health) and payors (Aetna and Health Care Service Corp.). With costs soaring and major industry participants leading the way, providers and payors will continue to experience both financial and regulatory pressure to transition toward VBC.

Healthcare Spend in the United States – Absolute and as a % of GDP

\$ in Billions



Source: Center for Medicare and Medicaid Services (CMS) National Health Expenditure Accounts

Potential Roadblocks to Adoption

While the push toward VBC has drawn praise in many circles, some are concerned that if providers make the transition before they fully develop the ability to accurately measure quality of care, negative patient outcomes could result. As providers profit from “gain share,” or the amount of the original procedure price remaining after care is provided, they may be motivated to “underprovide” care. Therefore, quality measurement and analytical tools will be required to ensure that quality goals are met and to inform provider reimbursement.

Healthcare providers may also resist adoption of VBC, as the transition is likely to introduce administrative burdens—such as reimbursement design and quality measurement—and compress margins on care delivery. The trend toward provider consolidation makes it more likely that large systems can rely on broad service offerings as opposed to competing on price and quality. It is also possible that large providers with significant regional market share could refuse to participate in payment reform and clinical care initiatives.

In these scenarios, the onus may fall on payors to develop attractive benefit designs, care models, and reimbursement strategies to lure providers into their networks.

Components of VBC Transition

As the pressure to improve overall quality of care while keeping costs under control continues, we expect—with varying degrees of certainty—to observe the following:

- Increase in **Population Health Management** (PHM) efforts by providers
- Implementation of evidence-based **clinical pathways** by providers
- Increased use of **quality measurement** tools to inform provider reimbursement
- Focus on **alternative reimbursement** schemes by providers
- **Payor/provider collaboration** to improve patient outcomes

Each of these trends is explored in more depth below:

Population Health Management (PHM)

Proactive application of strategies and interventions to defined groups of individuals across the continuum of care in an effort to improve the health of the individuals within the group.

Intended Outcomes: The goal of PHM is to keep a patient population as healthy as possible, reducing the need for more costly interventions, such as emergency department visits, hospitalizations, imaging tests, and procedures.

Requirements for Implementation: A provider organization must provide proactive preventive and chronic care to the population, both during and between encounters with the healthcare system. This requires providers to regularly engage patients and support their efforts to manage their own health. At the same time, care managers must identify and provide preventative care to high-risk patient populations to prevent costly health complications. The use of evidence-based care to diagnose and care for patients in a consistent, efficient manner is also part of the provider-based PHM strategy.

Key Players

- Health Catalyst
- Athenahealth
- Evolent Health
- Wellcentive
- Optum
- Phytel, Explorys (IBM)
- xG Health Solutions (Geisinger)
- Valence Health
- Camden Group (GE)

Case Study: “Indiana University Health and Evolent Health Partner to Improve Population Health”

Indiana University Health, an Indianapolis-based hospital system, partnered with Evolent Health to design ways to keep track of and care for patients that keep them healthier while reducing their medical spending. Evolent worked with IU Health to implement patient tracking systems and predictive analytics that recommend preventative measures for certain chronic conditions. Over the course of 2015, IU Health saw:

- Hospital admissions per thousand patients down 7% year over year
- Use of high-end imaging procedures reduced by 27%
- Days IU Health patients spent in skilled-nursing facilities down 25%

Clinical Pathways Development/Implementation

A structured, multidisciplinary plan of care that standardizes treatment for a specific clinical problem, procedure, or episode of healthcare in a specific population using evidence-based protocol.

Intended Outcomes: For specific conditions and populations, clinical pathways are intended to:

- Enhance quality of care across the continuum by improving risk-adjusted patient outcomes
- Promote patient safety and satisfaction
- Standardize care practices for specific conditions and populations
- Optimize use of resources

Requirements for Implementation: Effective implementation of a clinical pathways program requires the ability to apply a historical understanding of treatment outcomes to specific patient situations. This requires connecting millions of historical care and outcome-related data points with the full health and demographic profile of the patient to be treated. Thus, access to large patient health databases, the ability to analyze that data for specific health situations and outcomes, and the ability to apply that data to current patient situations is critical.

Key Players:

- Lumiata
- xG Health Solutions (Geisinger)
- Zynx Health
- Truven Health Analytics
- Inovalon
- Orion Health
- Q-Centrix

Case Study: “Berkshire Medical Center Leverages ZynxEvidence Tool”

Berkshire Medical Center (BMC), a Berkshire Health Systems affiliate, is a 302-bed community hospital in Pittsfield, Mass. Though BMC was a nominal practitioner of evidence-based medicine, it was not clear that physicians had fully adopted the methodology or believed in its efficacy. BMC set out to institutionalize the clinical pathways approach and measure outcomes through the use of ZynxEvidence, a tool that provides clinical support based on evidence-based protocol. Following implementation, adoption rates among surgeons lagged until it was revealed that surgery teams were failing to utilize several commonly accepted practices. As a result, the Chairman of Surgery began to collaborate with surgery teams to integrate ZynxEvidence into all surgery protocols. Major improvements in quality outcomes included:

- Wound infection decreased from 17.4% to 14.3%
- Postoperative respiratory complications decreased from 11% to 6%
- Average surgical stay decreased from 8.4 days to 5.8 days

Quality Measurement/Analytics

The ability to measure quality outcomes related to clinical processes, patient safety, efficient resource usage, care coordination, population health, and adherence to clinical guidelines.

Intended Outcomes: Value-based compensation models base payment to healthcare providers on their ability meet quality standards and benefit patients while reducing costs. The ability to report on a wide variety of quality measures (requirements for which vary by payor) is becoming more critical for providers as an increasing percentage of payments are tied to value-based compensation models. Quality measurements and analytics tools are intended to aid providers in simplifying and increasing the accuracy of the quality reporting process to ensure appropriate compensation.

Requirements for Implementation: Providers need sophisticated analytics, reporting, and real-time surveillance tools to help them measure quality and financial performance for each population of patients.

Key Players

- Q-Centrix
- Inovalon
- Health Catalyst
- Explorys (IBM)
- Valence Health

Case Study: “Q-Centrix Improves Registry Concurrency at Grady Memorial Hospital”

Grady Memorial Hospital, a large public hospital in Atlanta, sought to improve its rate of registry concurrency by outsourcing registry abstraction to Q-Centrix. Registry abstraction refers to the creation of a detailed record of the quality and outcome of a healthcare interaction, and a registry is considered concurrent if it has an 80% record closure rate within 60 days of patient discharge. For the six months prior to outsourcing, Grady achieved a registry concurrency rate of 58%, leading to an incomplete record of health outcomes for various disease states. Following outsourcing to Q-Centrix, the registry concurrency rate rose to 95%, allowing Grady to conduct quality and performance benchmarking and improving its ability to make data-driven decisions to positively impact patient care.

Alternative Reimbursement

In the context of the transition from the fee-for-service model to the value-based model, alternative reimbursement refers to the challenges associated with billing and collecting reimbursement for patient outcomes as opposed to individual tests and procedures.

Intended Outcomes: Alternative methods of reimbursement are intended to motivate providers to focus on the preventative, chronic, and acute treatment that achieves the best possible patient outcome with the minimum expenditure of resources.

Requirements for Implementation: At the operational level, this transition involves addressing the practical concerns related to new payment models, including:

- Evaluating physician fee schedules
- Assessing contract terms
- Determining budget impact of new payment methodology
- Considering the pricing impact of condition severity and other adjustments

Key Players

- Evolent Health
- Athenahealth
- Inovalon
- Veralon

Payor/Provider Collaboration

Payor/provider partnerships that work to reduce costs and improve outcomes through sharing of patient medical risk and financial and medical information.

Intended Outcomes: Improved quality, value, and patient outcomes via risk and information sharing.

Requirements for Implementation: Providers may need to make investments in infrastructure and capabilities to enable risk adoption. Additionally, risk adoption by providers is enforceable only when patients receive care from a specific provider network; under PPO plans, it is difficult to hold providers accountable for their performance serving “mobile” patients. From a communications standpoint, seamless patient information flow between payors and providers is required to support collaboration on care decisions and risk sharing.

Key Players

- Health Catalyst
- Wellcentive
- Trizetto (Cognizant)
- Valence Health
- HealthX

Case Study: “Payor-Provider Collaboration in Accountable Care Reduced Use and Improved Quality in Maine Medicare Advantage Plan”

Aetna and NovaHealth, an independent physician association based in Portland, Maine, launched a pilot collaboration program focused on shared data, financial incentives, and care management to improve health outcomes for approximately 750 Medicare Advantage members. Over the three-year study, the pilot patient population received marked improvement in quality of care as well as a broad reduction in cost. The patient population in the pilot program had 50% fewer hospital days, 45% fewer admissions, and 56% fewer readmissions than statewide unmanaged Medicare populations.

NovaHealth’s total per-member costs for its Aetna Medicare Advantage members were 16.5% to 33% lower than costs for members not patronizing NovaHealth. In addition, clinical quality metrics for several chronic conditions, annual office visits, and post-discharge follow-up for patients in the program were consistently higher than the unmanaged Medicare populations statewide.

Can Everybody Win?

The proponents of value-based care often describe it as a win-win-win: aligned incentives result in lower prices charged to payors, better collaboration among providers, and superior care for patients. It is an attractive theoretical picture—but one that should be unpacked to understand the implications for all major market players.

Providers

It goes without saying that the impact of the VBC transition to healthcare providers will be deep and comprehensive. Significant value can be realized from providers' ability to improve lines of communication and collaboration across provider types—from hospitals to pharmacies to physical therapy centers, coordinating care will be critical to managing costs and maintaining financial solvency.

Cost containment for providers could take many forms, but population health management and clinical pathways represent two major tactics for providing targeted preventative care and lowering cost drivers like infection and readmission. Along the same vein, the ability to measure and track clinical quality metrics will become increasingly important for providers as reimbursement is increasingly tied to measures of quality.

Implementing the necessary analytical tools for providers will be an expensive endeavor over the next five to 10 years as medical contracts transition to VBC models. Implementers of these tools stand to benefit in the short- to mid-term, while proprietary software vendors stand to benefit in the long-term from licensing fees and upgrades. Pending the long-term success of VCB, we might expect to observe an ecosystem similar to the major vendors and smaller implementation partners that have sprung up around Meaningful Use EHR requirements in the past five years.

Conversely, major suppliers of hospitals and other providers may face downward pricing pressure on equipment and other materials as hospitals seek to defend already thin margins. Consolidation trends resulting in increased purchasing clout will support this trend.

Payors

Aside from regulatory pressures, private payors will be the major drivers of the transition to VBC. In an evolving market, major payors face threats of disintermediation by potential competitors, including the threat of providers assuming payor responsibilities themselves. If payors fail to provide value to employers, they run the risk of large employers contracting directly with health systems to provide care for their employees.

To mitigate these risks, payors are motivated to push for the adoption of new payment models and increased collaboration with providers on patient care. Consultancies that focus on healthcare reimbursement design stand to benefit from this trend. Additionally, payor/provider collaboration requires seamless communication of patient EHR, as well as the design of risk-sharing agreements. Vendor/consultancies like Health Catalyst and Valence Health are well positioned to provide the systems and know-how to achieve these aims.

As the traditional health insurance model faces potential disruption motivated by rising prices, innovation, and legislation, payors will be under ever-growing pressure to control the costs being passed to employers and retail consumers.

Financial Sponsors

Healthcare is an attractive but challenging market for financial sponsors. Disruptive legislation, acquisitive financial sponsors, and highly visible acquisitions and IPOs created a highly competitive market in 2015. Pressure from government and insurance institutions to reduce the cost of providing healthcare have made companies with the purported ability to do so extremely attractive, boosting valuations.

Finding success in this market will require a differentiating ability to weed out promising candidates from those providing vaporware and exaggerating claims of capabilities. For example, a search for “Clinical Pathways” returns a whole host of companies claiming advanced point-of-care clinical decision tools (CDS). Successful acquisition strategies will involve developing an intimate understanding of the technologies and capabilities of these companies, and picking winners who justify lofty acquisition prices.

Strategic Buyers

Similar to the financial sponsors, strategic buyers face a frothy market for acquisitions in the HIT and healthcare consulting space—specifically for companies with technology and capabilities claiming to cut costs and improve quality of care delivery.

To justify high purchase prices, strategic buyers will need to identify companies with which they can achieve real operational and growth synergies. Adjacency to core offerings is an obvious consideration; buyers must also consider how they can leverage existing delivery channels, operational expertise, cash reserves, and relationships to push acquisitions to otherwise unachievable levels of success. A prime example is IBM’s recent acquisitions of Phytel and Explorys to build out its existing Watson Health platform. With these acquisitions, IBM was able to pair its unmatched cognitive capabilities with Phytel’s massive clinical care database and Explorys’ analytical capabilities. Successful strategic buyers will be those whose integrated organization represents more than the sum of its parts.

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Appendix – Key Players in Value-Based Care

Company	Description	Population Health Management	Clinical Pathways	Quality Measurement	Alternative Reimbursement	Payor/Provider Collaboration
Health Catalyst	Health Catalyst provides data warehousing, analytics, and outcomes improvement solutions to healthcare organizations	✓		✓		✓
Athenahealth	Athena Health provides cloud-based services for healthcare and point-of-care applications focused on EHR, population health and patient engagement	✓			✓	
Evolent Health	Evolent Health guides health systems in migration to value-based care and population health management by providing consulting and tech solutions	✓			✓	
Wellcentive	Wellcentive develops cloud-based population health management, care management and data analytics solutions for providers	✓				✓
Optum	Operating as UnitedHealth's health services platform, Optum focuses on improving the healthcare industry via population health management and clinical care improvement technologies	✓	✓			
IBM (Phytel, Explorys)	Operating as Watson Health, IBM combines the largest healthcare databases in the world with cognitive and analytical technologies to improve the coordination and delivery of healthcare	✓	✓	✓		
xG Health Solutions	xG Health Solutions provides healthcare consulting and analytics services including population health data analytics, interpretation and reporting	✓	✓			
Valence Health	Valence Health provides clinical integration, population health, and value-based care solutions to companies across the healthcare spectrum	✓		✓		✓
GE (Camden Group)	Camden Group provides strategy and operational consulting to payors and providers transitioning to value-based care	✓				✓
Lumiata	Lumiata Inc. provides medical science based graph analytics solutions to produce health insights and predictions, improving clinical quality and efficiency	✓	✓			

Company	Description	Population Health Management	Clinical Pathways	Quality Measurement	Alternative Reimbursement	Payor/Provider Collaboration
Zynx Health	Zynx Health provides evidence-based clinical improvement and mobile care solutions for hospitals and healthcare organizations		✓			
Truven Health	Truven Health Analytics provides healthcare data integration and analytics solutions and services through two segments: commercial and government	✓	✓			
Inovalon	Inovalon is a healthcare technology company that combines advanced cloud-based data analytics and clinical intervention platforms to achieve quality outcomes		✓	✓	✓	
Orion Health	Orion Health offers its clients clinical portals, clinical intelligence tools, shared-care solutions, admin automation and best practice clinical workflow assessment and design	✓	✓			
Q-Centrix	Q-Centrix delivers clinical decision support technology which enables clinicians to change diagnoses in course of treatment, as well as measure and report on clinical quality metrics		✓	✓		
Veralon	Veralon is a healthcare consulting firm focused on financial aspects of VBC transition including physician compensation and alternative reimbursement model development				✓	
Trizetto (Cognizant)	Trizetto Corporation develops healthcare information technology solutions and services for health plans, benefits administrators, health systems, and healthcare providers				✓	✓
HealthX	Healthx provides a digital engagement platform for connecting payors, providers, consumers, employers and brokers			✓		✓



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